



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,693	03/21/2001	Wayne B. Hile	35451/121 (3602.Palm)	3290

26371 7590 07/19/2004  
FOLEY & LARDNER  
777 EAST WISCONSIN AVENUE  
SUITE 3800  
MILWAUKEE, WI 53202-5308

EXAMINER

DADA, BEEMNET W

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/813,693

**Applicant(s)**

HILE, WAYNE B.

**Examiner**

Beemnet W Dada

**Art Unit**

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-35 have been examined.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 8-10, are 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Parvulescu et al. (hereinafter refereed to as Parvulescu) (US Patent No. 6,687,497 B1).

4. As per claim 1, Parvulescu teaches a method of disabling at least a portion of at least one personal electronic device on board a vehicle, comprising:

sending a radio frequency (RF) signal from a transmitter on the vehicle [column 4, lines 9-33];

receiving the RF signal by a receiver of the at least one personal electronic device [column 5, lines 51-54];

and interpreting the RF signal in a manner causing at least a portion of the at least one personal electronic device to be disabled [column 5, lines 51-64].

5. As per claim 10, Parvulescu teaches a system for at least partially disabling personal electronic devices within a specified area, comprising:
  - a transmitter configured to send a radio frequency (RF) signal, the transmitter located within the specified area [column 4, lines 9-33];
  - a receiver configured to receive the RF signal, the receiver being coupled to the personal electronic device [column 5, lines 51-54];
  - program logic configured to disable at least a portion of the personal electronic device in response to the RF signal [column 5, lines 51-64].
6. As per claims 2, Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method wherein sending the radio frequency signal is carried out more than once during a use of the vehicle [column 4, lines 21-23].
7. As per claims 3 and 14, Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the receiver is a Bluetooth receiver (a cellular telephone meets the recitation) [column 5, lines 65-67 and column 6, lines 1-7].
8. As per claims 4, 15 and 17 Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the receiver is a cellular phone receiver [column 5, lines 65-67 and column 6, lines 1-7].
9. As per claim 8, Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein sending the radio frequency is continued throughout

the duration of a period in which the personal electronic devices are to remain at least partially disabled [column 4, lines 21-23].

10. As per claims 9 and 16, Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one personal electronic device includes a handheld computer including an RF receiver (a handheld communication device) [column 5, lines 65-67 and column 6, lines 1-7].

11. As per claim 18, Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of the personal electronic devices is a text messaging device (a cellular telephone meets the recitation) [column 5, lines 65-67 and column 6, lines 1-7].

12. As per claim 19, Parvulescu teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of the personal electronic devices is a laptop computer (a handheld communication device) [column 5, lines 65-67 and column 6, lines 1-7].

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 7, 11, 20-23, 26-31, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parvulescu (US Patent No 6,687,497 B1) in view of Beamish et al. (hereinafter refereed to as Beamish) (US Patent No. 6,694,143).

15. As per claims 20 and 28, Parvulescu teaches a method of preparing an airplane for takeoff, the method comprising:

transmitting a radio frequency (RF) signal configured to be received by RF receivers of the personal electronic devices on board the airplane and configured to cause at least partial disablement of the personal electronic devices [column 4, lines 9-33 and column 3, lines 64-69]. Furthermore, Parvulescu teaches disabling an electronic device on board the airplane that are capable of disrupting the airplane flight equipment during flight takeoff and landing [column 3, lines 64-69]. Parvulescu does not explicitly teach providing a warning message to passengers relating to the disablement of personal electronic devices on board the airplane.

However Beamish teaches a method of providing a warning message to passengers relating to the disablement of personal electronic devices on board the airplane [column 2, lines 23-35, column 1, lines 31-37]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a warning message to passengers relating to the disablement of electronic device as per teachings of Beamish into the method of disabling electronic device on board airplane, in order to alert passengers turn off personal electronic device during airplane takeoff and landing and further protect from RF interferences.

16. As per claims 21 and 29, the combination of Parvulescu and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein transmitting the RF signal is carried out more than once [column 4, lines 21-23].

17. As per claims 22 and 30, the combination of Parvulescu and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of receiver is a Bluetooth receiver (a cellular telephone meets the recitation) [column 5, lines 65-67 and column 6, lines 1-7].

18. As per claims 23 and 31, the combination of Parvulescu and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein the at least one of the receivers is a cellular phone receiver [column 5, lines 65-67 and column 6, lines 1-7].

19. As per claims 26 and 34, the combination of Parvulescu and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein transmitting the RF signal is continued throughout the duration of a period in which the personal electronic devices are to remain at least partially disabled [column 4, lines 21-23].

20. As per claims 27 and 35, the combination of Parvulescu and Beamish teaches the method as applied above. Furthermore, Parvulescu teaches the method, wherein at least one of the personal electronic devices includes a handheld computer including an RF receiver (a handheld communication device) [column 5, lines 65-67 and column 6, lines 1-7].

Art Unit: 2135

21. As per claims 7 and 11, Parvulescu teaches a method of disabling at least portion of at least one personal electronic device on board a vehicle as applied above to claims 1 and 10 above. Parvulescu does not explicitly teach providing an announcement relating to the disabling of personal electronic device. However Beamish teaches a method of providing a warning message to passengers relating to the disablement of personal electronic devices on board the airplane [column 2, lines 23-35, column 1, lines 31-37]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a warning message to passengers relating to the disablement of electronic device as per teachings of Beamish into the method of disabling electronic device on board airplane, in order to alert passengers turn off personal electronic device during airplane takeoff and landing and further protect from RF interferences.

22. Claims 5, 6, 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Parvulescu (US Patent No. 6,687,497 B1) in view of Bluestein et al. (hereinafter refereed to as Bluestein) (US Patent No. 4,531,021).

23. As per claims 5 and 12, Parvulescu teaches a method of disabling at least portion of at least one personal electronic device on board a vehicle as applied above to claims 1 and 10 above. Parvulescu does not explicitly teach encrypting the RF signal. However Bluestein teaches a method of encrypting RF signals at a transmitter [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to encrypt the RF signal sent by a transmitter as per teachings of Bluestein and include it into the method of RF signal transmission taught by Parvulescu in order to securely transmit RF signals



between a transmitter and a receiver and further protect transmitted signal from unauthorized use.

24. As per claims 6 and 13, Parvulescu teaches a method of disabling at least portion of at least one personal electronic device on board a vehicle as applied above to claims 1 and 10 above. Parvulescu does not explicitly teach decrypting the RF signal. However Bluestein teaches a method of decrypting RF signals at a receiver [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to decrypt the RF signal sent by a transmitter as per teachings of Bluestein and include it into the method of RF signal transmission taught by Parvulescu in order to securely transmit RF signals between a transmitter and a receiver and further protect transmitted signal from unauthorized use.

25. Claims 24, 25, 32 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Parvulescu (US Patent No. 6,687,497 B1) in view of Beamish (US Patent No. 6,694,143) as applied to claims 20 and 28 above and further in view of Bluestein (US Patent No. 4,531,021).

26. As per claims 24 and 32, the combination of Parvulescu and Beamish teach a method of preparing an airplane for takeoff comprising, transmitting an RF signal for disabling a device as applied to claims 20 and 28 above. The combination of Parvulescu and Beamish does not explicitly teach encrypting the RF signal. However Bluestein teaches a method of encrypting RF signals at a transmitter [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to encrypt the RF signal sent by a transmitter as per teachings of Bluestein and include within the method of RF signal

transmission taught by the combination of Parvulescu and Beamish in order to securely transmit RF signals between a transmitter and a receiver and further protect transmitted signal from unauthorized use.

27. As per claims 25 and 33, the combination of Parvulescu and Beamish teach a method of preparing an airplane for takeoff comprising, transmitting an RF signal for disabling a device as applied to claims 20 and 28 above. The combination of Parvulescu and Beamish does not explicitly teach decrypting the RF signal. However Bluestein teaches a method of decrypting RF signals at a receiver [see abstract]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to decrypt the RF signal sent by a transmitter as per teachings of Bluestein and include within the method of RF signal transmission taught by the combination of Parvulescu and Beamish in order to securely transmit RF signals between a transmitter and a receiver and further protect transmitted signal from unauthorized use.

### ***Conclusion***

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

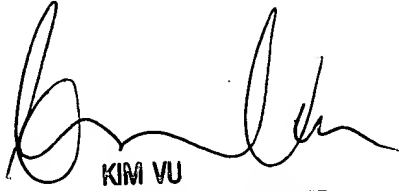
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (703) 305-8895. The examiner can normally be reached on Monday - Friday (8:30 am - 6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

June 29, 2004



KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100